Claims

1 A tooth bleaching composition free of a hydrocarbon humectant comprising of a peroxide compound from about 1-30% by weight, water from about 30-60% by weight and polyoxyethylene-polyoxypropylene non-ionic surfactant gelling agent from about 25 to 30% by weight and an inhibitor of catalase from about 0.1 to 2% by weight.

2. The tooth bleaching composition according to claim 1, includes a mixed metal chelating system consisting of:
a. an organic chelating agent;
b. a condensing phosphate chelating agent;
c. a metal precipitating agent.

3. The tooth bleaching composition according to claim 1, includes a mixed surfactant system consisting of an anionic surfactant and a non-ionic surfactant.

4. The tooth bleaching composition according to claim 1, includes an inhibitor of catalase.

5. The tooth bleaching composition according to claim 1 wherein the peroxide containing compound is hydrogen peroxide.

6. The tooth bleaching composition according to claim 1 wherein the peroxide containing compound is carbamide peroxide.

7. The tooth bleaching composition according to claim 1 wherein the carrier of peroxide is water.

8. The tooth bleaching composition according to claim 1 wherein the gelling agent is polyoxyethylene-polyoxypropylene non-ionic surfactant.

9. The tooth bleaching composition according to claim 2 wherein the organic chelating agent is 1-hydroxyethylidene-1,1-diphosphonic acid consisting of about 0.25% to 5% by weight of the composition.

10. The tooth bleaching composition according to claim 2 wherein the condensing phosphate chelating agent is sodium pyrophosphate, sodium triphosphate, trisodium phosphate or a combination thereof consisting of about 0.25 to 2% by weight of the composition.

11. The tooth bleaching composition according to claim 2 wherein the metal precipitating agent is

sodium fluoride consisting of about 0.1 to 1% of the composition.

12. The tooth bleaching composition according to claim 3 wherein the anionic surfactant is sodium lauryl sulfate consisting on about 0.5 to 2.5% of the composition

13. The tooth bleaching composition according to claim 3 wherein the non-ionic surfactant is tween 20 consisting of about 0.5 to 3% of the composition.

(Deleted Claims 14 to 18 are bold and bracketed [ ]. New Claim 14 follows deleted Claims.)

[14. The method according to claim 1, further including placing the composition in a dental splint prior to applying the composition to the tooth surface.]

[5. The method according to claim I, alternatively including applying the composition onto the tooth surface then applying the tray to prevent contact between the lips and the gel.]

[~~6. The method according to claim I, by including isolating the lips with a cheek retractor,~~ applying a bioadhesive composition onto the gums and applying the whitening composition onto the teeth.]

[7 The method according to claim I, by including applying the composition to a toothbrush and contacting the tooth surfaces.]

[18. The method of whitening teeth including the following steps to protect the lips, the gingival and other soft tissues:

- **a. applying the bioadhesive material to the gums;**
- **b. applying the peroxide composition to the teeth;**
- **c. applying a flexible film which does not react with the peroxide composition in contact with the bioadhesive material and the peroxide composition;**
- **d. molding the flexible film to cover the surfaces of the teeth to prevent contact between the peroxide composition and the lips, tongue and other soft tissues of the mouth.]**

Add new:

A1 ~~14~~. 19 The method of bleaching teeth by applying to the teeth a tooth bleaching composition free of ~~a hydrocarbon humectant comprising of~~ a peroxide compound from about 1-30% by weight, water from about 30-60% by weight ~~and~~ polyoxyethylene-polyoxypropylene non-ionic surfactant gelling agent from about 25 to 30% by weight and an inhibitor of catalase from about 0.1 to 2% by weight. based on which

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